

Appl. No. 09/699,897

In the Claims

Claims 1-27 (cancelled)

28. (currently amended) A PVD component consisting essentially of a material having a face-centered cubic crystalline structure, the component being produced by the method comprising inducing a sufficient amount of stress in the component to increase magnetic pass through flux exhibited by the component compared to pass through flux exhibited prior to inducing the stress.

C1
29. (currently amended) A sputter component produced by the method comprising:

unidirectionally first cold working a component blank to at least about an 80% reduction in cross-sectional area;

heat treating the cold worked component blank at least at about a minimum recrystallization temperature of the component blank; and

inducing a sufficient amount of stress in the heat treated component blank to increase magnetic pass through flux exhibited by the heat treated component blank compared to pass through flux exhibited prior to inducing the stress.

Appl. No. 09/699,897

30. (previously amended) A sputter target produced by the method comprising:

unidirectionally first cold rolling a target blank consisting essentially of nickel to at least about an 85% reduction in cross-sectional area;

heat treating the cold rolled target blank at a temperature between about 427 °C (800 °F) to about 482 °C (900 °F) for less than about 60 minutes; and

second cold rolling the heat treated target blank to a reduction in cross-sectional area of about 10% of the heat treated component, at least about 70% of a surface area at least within selected boundaries of a surface of the second cold rolled target blank exhibiting a (200) texture.

31. (original) A PVD component consisting essentially of nickel exhibiting a (200) texture over at least about 50% of a surface area at least within selected boundaries and having a sufficient amount of residual stress to exhibit higher magnetic pass through flux compared to pass through flux exhibited absent such stress.

32. (original) The component of claim 31 wherein the selected boundaries define a representative test area.

33. (currently amended) The component of claim 31 wherein the metal nickel exhibits an average grain size of less than about 50 microns.

Appl. No. 09/699,897

34. (new) The component of claim 28 comprising a majority crystallographic structure of (200).

35. (new) The component of claim 28 wherein the induced stress alone is not sufficient to substantially alter surface grain appearance.

36. (new) The component of claim 28 wherein the component consists essentially of nickel.

37. (new) The component of claim 28 wherein the material exhibits an average grain size of less than about 50 microns.

C2 38. (new) The component of claim 29 wherein the component blank consists essentially of a material having a face-centered cubic crystalline structure.

39. (new) The component of claim 29 wherein the heat treated component blank comprises a majority crystallographic structure of (200).

40. (new) The component of claim 29 wherein the induced stress alone is not sufficient to substantially alter surface grain appearance.

41. (new) The component of claim 29 wherein the component blank consists essentially of nickel.

42. (new) The component of claim 29 wherein the stress-induced component blank exhibits an average grain size of less than about 50 microns.

Appl. No. 09/699,897

43. (new) The target of claim 30 wherein the second cold rolling comprises
C2 unidirectionally rolling in the same direction as the first cold rolling.
